LORD

System Technical Parameters

Power consumption:	600 watt (average)
Total Weight:	24 Kg (53 Lb.)
Warning Time:	8 sec (700m@ A/C speed of 170 knot)
Field of View (FOV):	26˚
Field of Regard (FOR):	>80˚
Scan Time:	< 1 sec for each FOV
False Alarm Rate (FAR):	< 1/hour

elop
Electro-Optics Industries Ltd.

A Subsidiary of Elbit SYSTEMS

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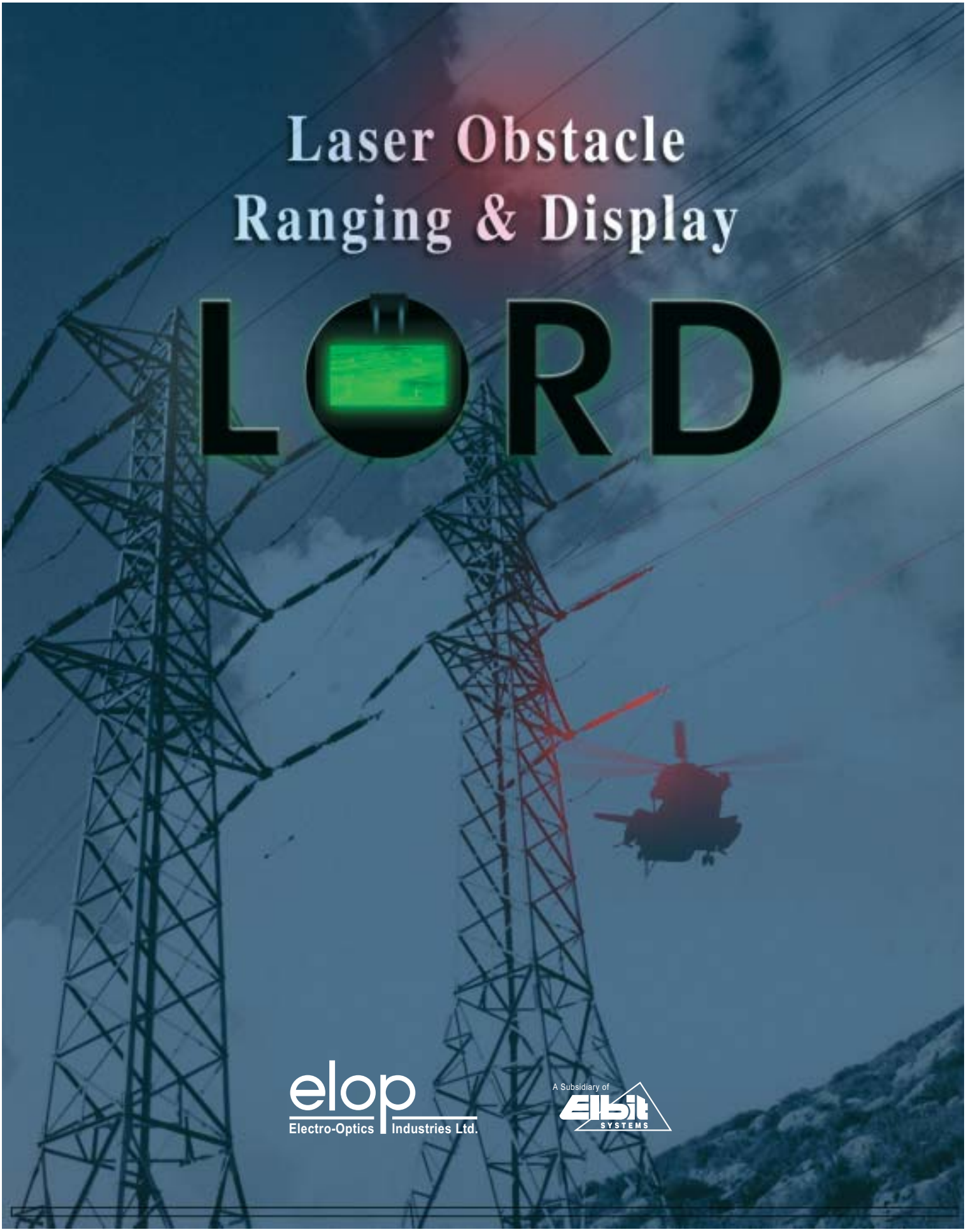
LORD/SH-OR/E-M 04/03- 1000 No. 8668

Laser Obstacle Ranging & Display

LORD



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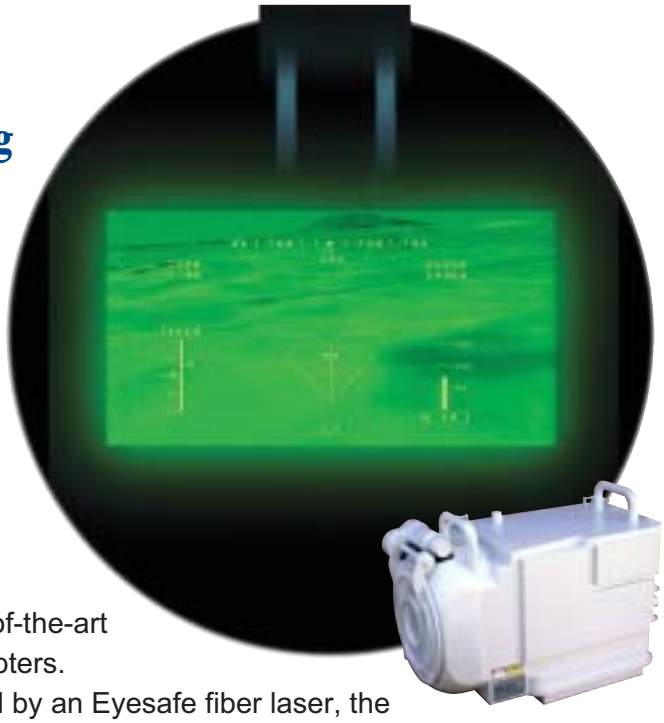
LORD- Laser Obstacle Ranging & Display for Helicopters



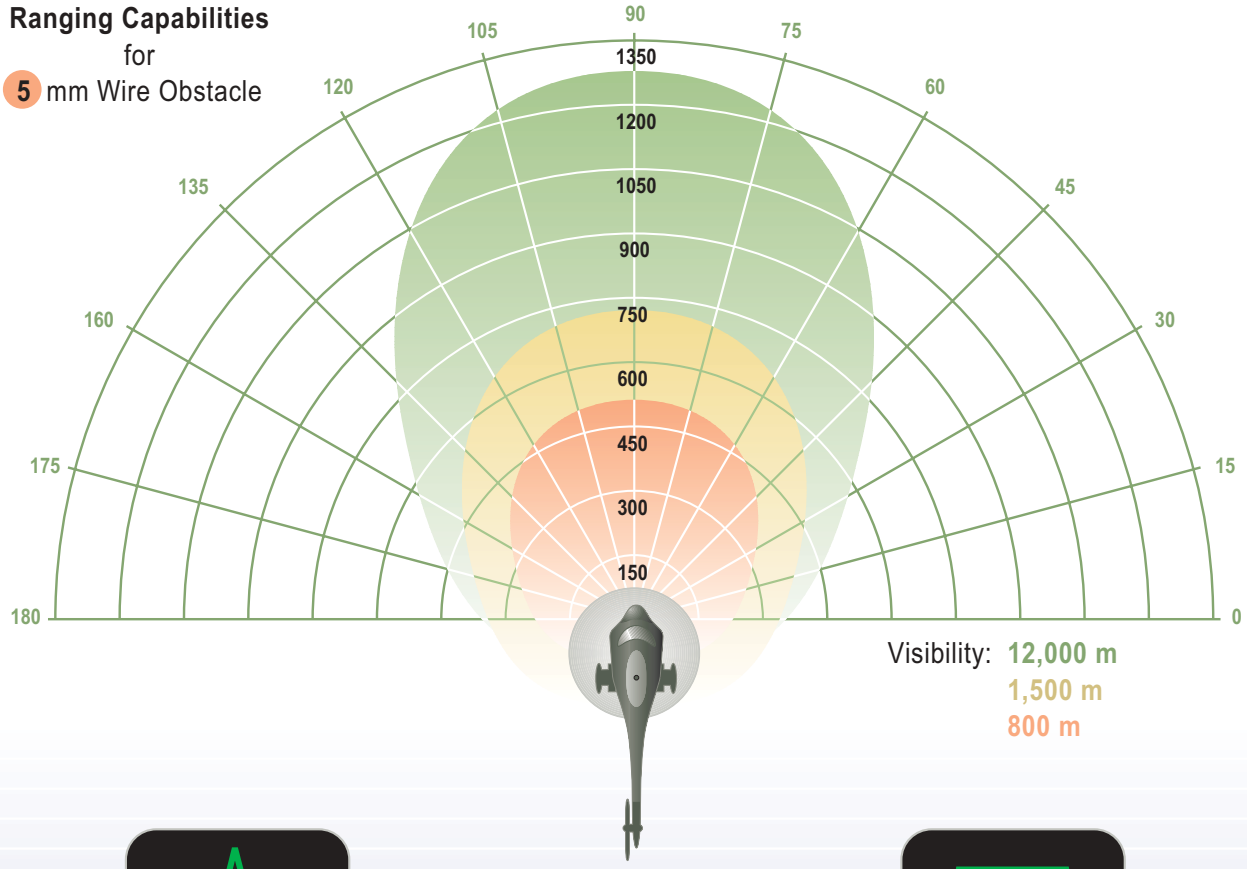
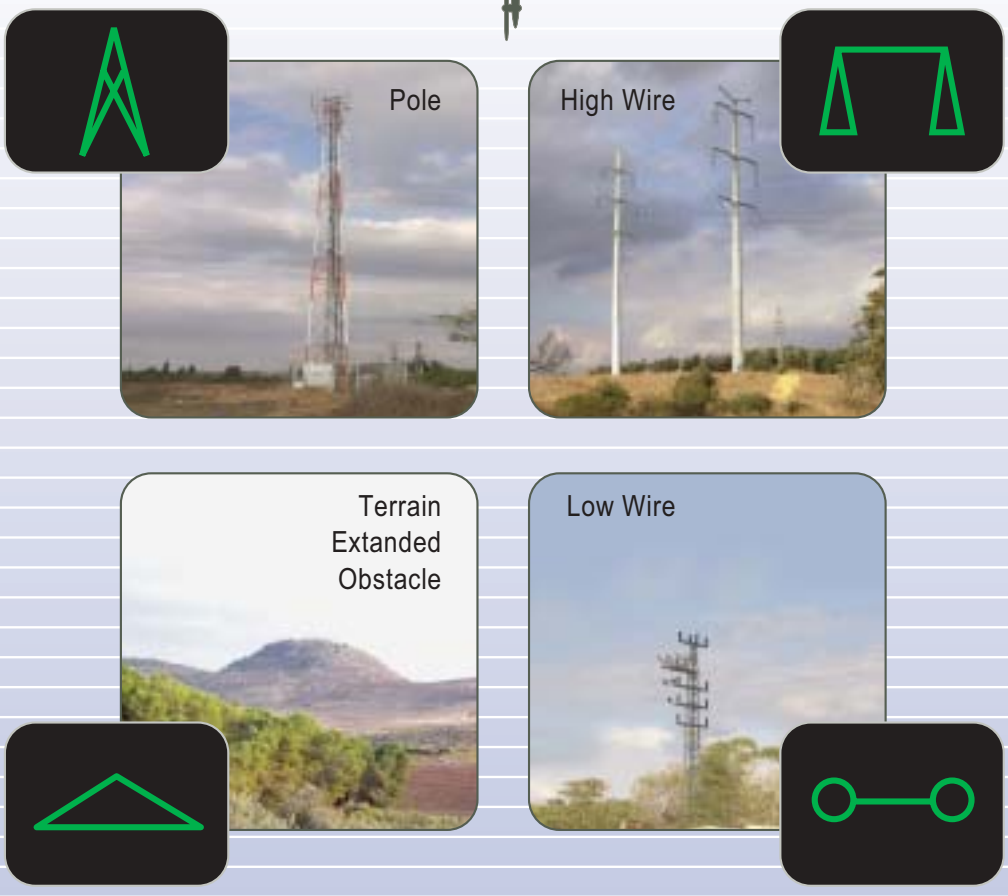
Collision with electrical cables, wires and antennas is one of the main threats helicopter pilots (both military and commercial) must deal with during low-level flight. But visual detection is almost impossible, especially under night and adverse weather conditions.

To meet this need, ELOP developed the LORD (Laser Obstacle Ranging and Display), a state-of-the-art E/O based Obstacle Warning System for helicopters.
Featuring high-speed beam scanning generated by an Eyesafe fiber laser, the LORD digitally maps the obstacles and terrain in front of the helicopter.
The system automatically analyzes the received data, providing the pilot with both audio and visual warning signals, increasing safety without adding to pilot's workload.

LORD Operational Parameters

- Obstacle Detection Range: within 2000m
- Determination of Obstacle Attributes (Type, absolute position and height AGL)
- Creation of a local digital terrain and obstacles mapping
- Optimized for high turn rate
- Wide performance envelop
- Operation under reduced visibility
- Visual and audio warnings issued for obstacles in the proximity of the A/C predicted flight-path only
- Warning time of 8 sec, independent of A/C velocity

Fiber Laser Advantages

- No need for optical bench
- Thermal and mechanical stability
- Improved reliability and LCC
- Control of pulse duration
- Enables flexible designs (modularity)

Ranging Capabilities
for
5 mm Wire Obstacle